

Monitoring Data Record

Project Title: I-2511CB (I-85 Widening) COE Action ID: 200221534  
Stream Name: Town Creek (Site 5) DWQ Number: 040271  
City, County and other Location Information: Rowan County, I-85 Widening (-TI-PINC Sta. 20+35)  
Date Construction Completed: Water turned on 12/6/06, Stream reforestation completed 12/13/06  
Monitoring Year: ( 2 ) of 5  
Ecoregion: \_\_\_\_\_ 8 digit HUC unit 03040103  
USGS Quad Name and Coordinates: \_\_\_\_\_

**Rosgen Classification:** \_\_\_\_\_

Length of Project: 1,375 Urban or Rural: Urban Watershed Size: \_\_\_\_\_  
Monitoring DATA collected by: M. Green and J. Young Date: 8/10/09

**Applicant Information:**

Name: NCDOT Roadside Environmental Unit  
Address: 1425 Rock Quarry Rd, Raleigh, NC 27610  
Telephone Number: (919) 861-3772 Email address: mlgreen@ncdot.gov

**Consultant Information:**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Telephone Number: \_\_\_\_\_ Email address: \_\_\_\_\_

**Project Status:** Complete

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**Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.):** Level 1 2 3

Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*

**Monitoring Schedule:** The permittee shall perform the following components of Level I monitoring each year for the 5-year monitoring period: Reference photos; plant survival (i.e., identify specific problem areas (missing, stressed, damaged or dead plantings), estimated causes, and proposed/required remedial action); visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. The permittee shall submit the monitoring reports to the Corps of Engineers, Raleigh Regulatory Field Office Project Manager, within sixty days after completing the monitoring. If less than two bankfull events occur during the first 5 years, the permittee shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the five-year monitoring period, the Corps of Engineers, in consultation with the resource agencies, may determine that further monitoring is not required. It is suggested that all bankfull occurrences be monitored and reported through the required monitoring period. The permittee shall perform and submit photo documentation twice each year (summer and winter) for the 5-year monitoring period, and for any subsequently required monitoring period.

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Section 1. PHOTO REFERENCE SITES

*(Monitoring at all levels must complete this section)*

**Total number of reference photo locations at this site:** 5 photo point locations, 2 photos at each location. 2 additional photos were taken as an overview of the buffer area.

**Dates reference photos have been taken at this site:** 1/23/08, 9/4/08, 2/17/09, 8/10/09

**Individual from whom additional photos can be obtained (name, address, phone):** \_\_\_\_\_

**Other Information relative to site photo reference:** \_\_\_\_\_

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

**Section 2. PLANT SURVIVAL**

**Attach plan sheet indicating reference photos.**

Identify specific problem areas (missing, stressed, damaged or dead plantings):

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Estimated causes, and proposed/required remedial action:\_\_\_\_\_

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ADDITIONAL COMMENTS: Planted vegetation consisted of black willow and silky dogwood live stakes on the streambanks and tag alder, green ash, red maple, river birch, swamp chestnut oak, willow oak, and sycamore bareroot seedlings in the buffer area. The buffer area was replanted with river birch, swamp chestnut oak, and willow oak on 2/29/08 due to lack of planted vegetation. The planted species were noted surviving on site. Other vegetation noted included lespedeza, goldenrod, *Juncus* sp., cattail, sweetgum, privet, pokeberry, and various grasses. NCDOT will continue to monitor vegetation at this stream relocation.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

### Section 3. CHANNEL STABILITY

**Visual Inspection:** The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The Town Creek stream relocation is stable for the Year 2 Summer evaluation, except for some minor bank scouring on the left bank in front of a rock structure. NCDOT will continue to monitor this stream relocation.

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Date Inspected 8/9/09	-TI- PINC Sta. 16+50	Station Number	Station Number	Station Number	Station Number
Structure Type	Rock Structure				
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?	Bank scouring on left bank				
Other problems noted?					

# Town Creek



Photo Point #1 (Upstream)



Photo Point #1 (Downstream)



Photo Point #2 (Upstream)



Photo Point #2 (Downstream)



Photo Point #3 (Upstream)



Photo Point #3 (Downstream)



# Town Creek



Photo Point #4 (Upstream)



Photo Point #4 (Downstream)



Photo Point #5 (Upstream)



Photo Point #5 (Downstream)



(Overview looking downstream of buffer area)



(Overview looking upstream of buffer area)

8/12/91

I-2511CB

Town Creek  
Photo Point Locations



Photo Point 1	Photo Point 2
Photo Point 3	Photo Point 4
Photo Point 5	

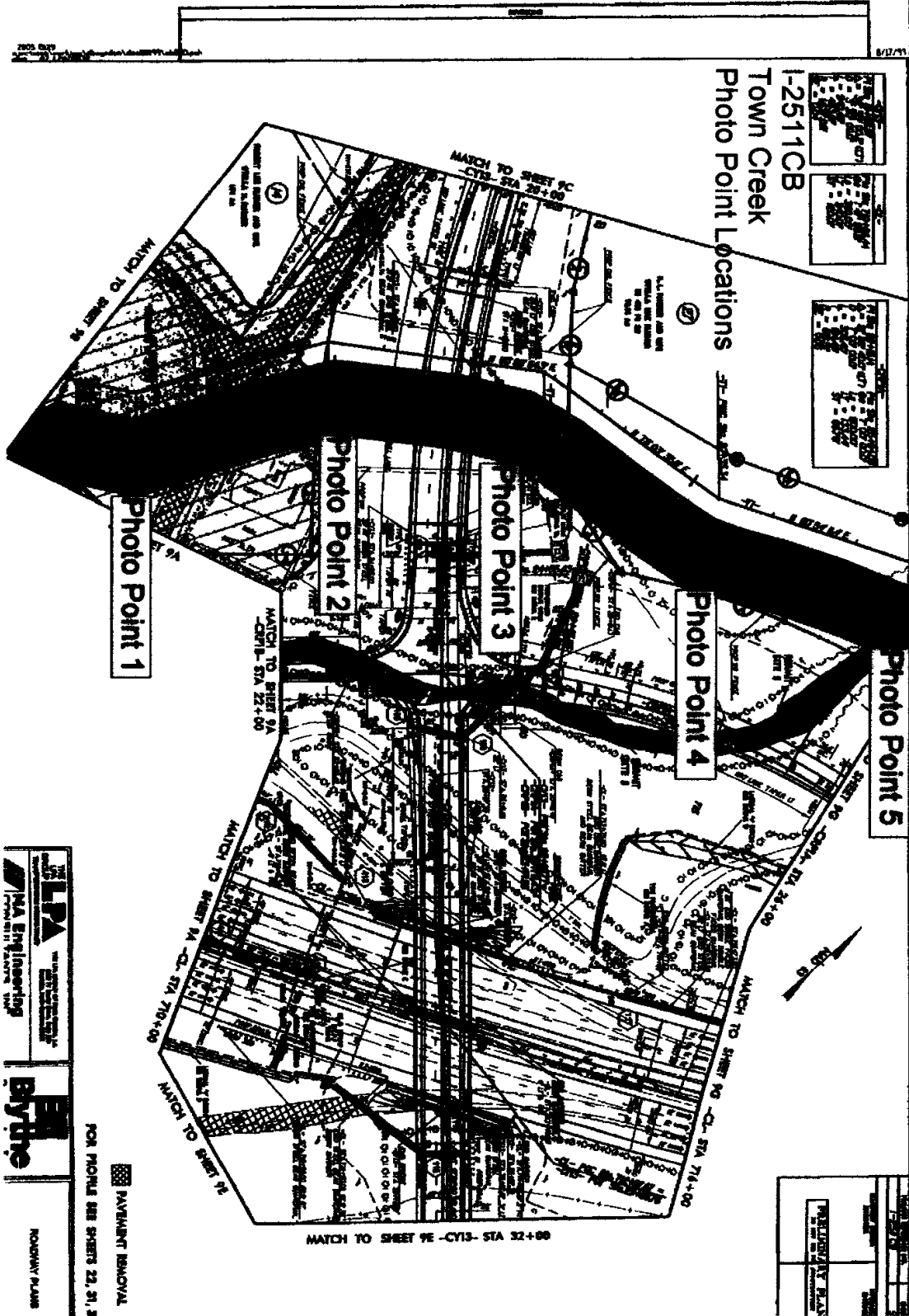


Photo Point 1

Photo Point 2

Photo Point 3

Photo Point 4

Photo Point 5

**HPA** ENGINEERING  
MA Engineering  
10000 11th Avenue NW  
Byline  
ROADWAY PLANS

PAVEMENT REMOVAL  
FOR PHOTO SEE SHEETS 22, 31, 3